FIELD SAMPLING PLAN
REVISION 0
FOR PERIMETER AIR MONITORING
AT THE
M&H ZINC REMOVAL SITE
LASALLE, LASALLE COUNTY, ILLINOIS

Prepared for
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Prepared by
WESTON SOLUTIONS, INC.
Region V Superfund Technical Assessment and Response Team

September 2, 2009

Approved by: _____ Date: _____
U.S. EPA Region V
On-Scene Coordinator

Project Dates of Sampling:	September 9 to 18, 2009
CERCLA Site/Spill Identifier No.:	B568
Contractor Organization:	Weston Solutions, Inc.
Contract Name:	START III
Contract No.:	EP-S5-06-04
Technical Direction Document No.:	S05-0001-0908-009
Document Control No.:	729-2A-AEMA

ACRONYM LIST

µm	micron
ACM	Asbestos containing material
CERCLIS	Comprehensive Environmental Response, Compensation, And Liability Information System
CERCLA	Comprehensive Environmental Response, Compensation, And Liability Act
CFR	Code of Federal Regulations
COC	Chain of Custody
ERB	Emergency Response Branch
ERRS	Emergency and Rapid Response Services
f/cc	asbestos fiber per cubic centimeter
FSP	Field Sampling Plan
IEPA	Illinois Environmental Protection Agency
mg/kg	milligram per kilogram
mg/m^3	milligram per cubic meter
MS/MSD	Matrix Spike/ Matrix Spike Duplicate
NIOSH	National Institute for Occupational Safety and Health
NPL	National Priorities List
OSC	On-Scene Coordinator
OSHA	Occupational Safety and Health Administration
OU	Operable unit
PCB	Polychlorinated biphenyl
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
PVC	Polyvinyl chloride
QAPP	Quality Assurance Project Plan
QA/QC	Quality Assurance/Quality Control
REL	Recommended Exposure Level
RSL	Regional Screening Levels
SOP	Standard Operating Procedure
SSL	Site Screening Level
START	Superfund Technical Assessment and Response Team
SU	Standard units
TCLP	Toxicity Characteristic Leaching Procedure
TEM	Transmission Electron Microcopy
TPH	Total petroleum hydrocarbons
TSCA	Toxic Substances Control Act
TWA	Time-Weighted Average
U.S. EPA	United States Environmental Protection Agency
VOC	Volatile organic compound
WESTON	Weston Solutions, Inc.

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1.0 Introduction

This Field Sampling Plan (FSP) identifies the data collection activities and associated quality assurance/quality control (QA/QC) measures specific to the M&H Zinc Site (the Site) located in LaSalle, LaSalle County, Illinois. All data will be generated in accordance with the quality requirements described in the Weston Solutions, Inc. (WESTON) *Superfund Technical Assessment and Response Team (START) III Generic QAPP*, dated June 2006. The purpose of this FSP is to describe site-specific tasks that will be performed in support of the stated objectives. The FSP will reference back to the QAPP for generic tasks common to all data collection activities including routine procedures for sampling and analysis, sample documentation, equipment decontamination, sample handling, data management, data assessment and data review. Additional site-specific procedures and/or modifications to procedures described in the *START III Generic QAPP* are described in the following FSP elements.

This FSP is prepared, reviewed, and approved in accordance with the procedures detailed in the *START III Generic QAPP*. Any deviations or modifications to the approved FSP will be documented using **Table 1: FSP Revision Form.**

2.0 Project Management and FSP Distribution and Project Team Member List

Management of the Site will be as documented in the *START III Generic QAPP*. Refer to the *START III Generic QAPP* for an organizational chart, communication pathways, personnel responsibilities and qualifications, and special personnel training requirements.

The following personnel will be involved in planning and/or technical activities performed for this data collection activity. Each will receive a copy of the approved FSP. A copy of the FSP will also be retained in the Site file.

Personnel	Title	Organization	Phone Number	Email
Theresa Holz	OSC	U.S. EPA	312-886-6845	Holz.theresa@epa.gov
Lisa Graczyk	Project Manager	START	312-424-3339	lgraczyk@dynamac.com
Trenna Seilheimer	Site Lead	START	312-424-3314	trenna.sundquist@westonsolutions.com
Tonya Balla	Health and Safety	START	847-918-4094	t.balla@westonsolutions.com
Pamela Bayles	QA Reviewer	START	847-918-4030	pamela.bayles@westonsolutions.com

NOTES:
OSC – On-Scene Coordinator
QA – Quality Assurance
START – Superfund Technical Assessment and Response Team
U.S. EPA – United States Environmental Protection Agency

3.0 Planning and Problem Definition

3.1 Problem Definition

The Site is located in LaSalle, LaSalle County, Illinois (Figure 3-1). The entire Site is the location of former zinc smelting operations and consists of approximately 160 acres including associated abandoned buildings, a rolling mill, and the active Carus Chemical Company and its property. Based on the removal assessment results, friable asbestos-containing material (ACM) is present east of building 1943 at the Site. In addition, floor sweepings from inside the laboratory building contained concentrations of arsenic, cadmium, lead, and zinc exceeding the United States Environmental Protection Agency (U.S. EPA) Regional Screening Levels (RSLs), U.S. EPA Generic Site Screening Levels (SSLs), and toxicity characteristic leaching procedure (TCLP) criteria (lead only). The old laboratory borders the Carus Chemical Company and is in poor condition. There exists a high possibility that if the building were to collapse that the workers would be exposed to hazardous dusts. The presence of toxicity characteristic hazardous wastes in exceedance of regulatory criteria, friable asbestos, and deteriorating conditions where hazardous wastes are stored at the Site pose actual and potential threat to human health and the environment and meets the criteria for a U.S. EPA removal action. Therefore, U.S. EPA will conduct a removal action at the Site to remove the ACM located east of building 1943, remove the hazardous materials located in the laboratory building, and demolish the laboratory building. The removal action will begin on September 8, 2009, and is estimated to last approximately 2 weeks. Perimeter air sampling will be conducted during removal activities to assist in identifying potential off-site migration of metals, dust particulates, asbestos.

3.2 Site History and Background

The Site, located in La Salle, LaSalle County, Illinois, is approximately 160 acres inclusive of inactive primary zinc smelting operations and associated abandoned buildings, a rolling mill, and the active Carus Chemical Company and its property. Figure 3-2 shows the site features. The Site is bounded by the Little Vermilion River to the north and east and by private residences to the south and west. Tracts of farmland and a limestone quarry are located across the Little Vermilion River to the north and east of the Site, respectively. The City of LaSalle obtains their drinking water from a cluster of four wells with the nearest municipal well situated approximately 0.75 miles south of the Site. An abandoned sewer line runs across the property, which serves as a transport mechanism for surface water runoff directly into the Little Vermilion River. A wetland is located approximately 0.5 miles upstream from the Site and the Illinois River is located approximately 1 mile downstream of the Site.

Site operations began in 1858 when raw materials such as zinc ore and various grades of coal were transported to smelt zinc. A rolling mill was built on-site in 1866 to produce zinc sheets. This process included a furnace that used producer gas as fuel. Any sulfur dioxide generated was recovered and converted into sulfuric acid and stored in on-site tanks. The Site also had an ammonium sulfate fertilizer plant which was operational for a few years during the early 1950s. Coal mining occurred at the Site until 1937, where two mining shafts (one vertical, one horizontal)

remain today. Zinc smelting ceased in 1961, while sulfuric acid manufacturing halted in 1968. From this time until 1978 when bankruptcy was declared, the facility only performed rolling mill operations. This 12 acre tract was purchased by Fred and Cynthia Carus in 1980 and became the LaSalle Rolling Mills.

The LaSalle Rolling Mills worked under contract with the United States Mint to generate metal blanks for pennies and operated until 2000 when bankruptcy was declared. In 2003, U.S. EPA conducted an emergency removal action at the LaSalle Rolling Mills to address cyanide contamination, old plating line waste, and various other chemicals and storage tanks that remained after the rolling mill closure. This removal action is complete. The Carus Chemical Company and its property are located to the south of the rolling mills. The Carus Chemical Company has been operational since 1915 and mainly produces potassium permanganate.

The Site has been divided into two operable units (OU), OUl and 0U2. As negotiated by a settlement order signed in September 2006, OUl includes the Carus Chemical Company and property, the Little Vermilion River adjacent to the entire Site, and a large slag and sinter waste pile, approximately 6 acres in area and 40 to 100 feet in depth. OU2, approximately 140 acres, is identified as the production area of the former zinc smelting and rolling processes and the immediate property surrounding this area. Specifically, 0U2 includes the former rolling mill facility, approximately 150 associated former buildings and structures, a shallow slag and sinter pile which heterogeneously covers the former production area of the Site, several abandoned and closed mine shafts, an undeveloped woodland, and surrounding residential areas.

In 1991, the Site was listed in the Comprehensive Environmental Response, Compensation, And Liability Information System (CERCLIS) database under CERCLIS ID No. IL0000064782 as the Matthiessen and Hegeler Zinc Company. During the November 1991 Comprehensive Environmental Response, Compensation, And Liability Act (CERCLA) screening site inspection, and the December 1993 CERCLA Integrated Assessment sampling, the Illinois Environmental Protection Agency (IEPA) collected several samples from two primary sources of contamination. The first source is the six-acre waste pile located on the Carus Chemical Company property of the Site (OUl). The second source is a shallow waste pile, composed of sinter and slag heterogeneously deposited throughout the former smelter property, included within 0U2. Five of the samples were taken from the sinter slag cover on 0U2. The IEPA also observed a release to surface water during the 1993 screening which was subsequently substantiated by chemical analyses of sediment samples in the Little Vermilion River.

The Site was listed on the National Priorities List (NPL) on September 29, 2003. The two primary sources located on the property were used to score the site for the NPL. The contaminants discovered in the second source appear to be the result of former zinc smelter activities and ancillary operations as described above. Runoff from this shallow sinter and slag cover flows into the Little Vermilion River through natural drainage pathways and manmade conduits. In the central portion of 0U2, west of the abandoned railroad, there is a conduit running from an abandoned pump house to the Little Vermilion River as well as drainage which enters an old abandoned and collapsed storm sewer line which runs east-west across the entire width of 0U2.

The preliminary results of the U.S. EPA 2007 Phase 1 RI show there is ubiquitous metal contamination across the entire site, primarily were arsenic, lead, cadmium, copper, mercury, and zinc in soils, debris piles, building materials, surface water, and groundwater. There are also areas of high polychlorinated biphenyl (PCB) contamination in debris piles and surface and subsurface soils near Building 100, the rolling mill, and the furnaces. Trichloroethene contamination is also found in soils and groundwater in the vicinity of the rolling mill on 0U2. Polyaromatic hydrocarbons are detected ubiquitously on 0U2. Asbestos has been found in concentrations as high as 6.5 percent.

In August 2008, the U.S. EPA Remedial Branch asked for assistance from the U.S. EPA Emergency Response Branch (ERB) with the assessment of abandoned chemicals in a dilapidated laboratory and suspected ACM. On August 15, 2008, representatives from the U.S.EPA ERB and U.S. EPA remedial branch met at the site to look at the abandoned chemicals and potential ACM. The laboratory with abandoned chemicals was observed in poor condition and posed a threat release if the building were to collapse. As a result, the U.S. EPA ERB conducted a removal site assessment to address the abandoned chemicals and potential ACM.

During the removal assessment, nine potential ACM samples were collected for total asbestos analysis, two solid waste samples were collected for total metals and TCLP metals analysis, one solid waste sample was collected for pH analysis, one liquid waste sample was collected for flashpoint analysis, and one oil sample was collected from a manhole containing petroleum product for volatile organic compound (VOC), total petroleum hydrocarbons (TPH), and polychlorinated biphenyl (PCB) analysis. The metals results of the solid and liquid waste samples indicated concentrations of arsenic, cadmium, lead, and zinc exceeding their respective U.S. EPA RSLs and U.S. EPA SSLs. Arsenic concentrations ranged from 0.39 to 96 milligrams per kilogram (mg/kg), cadmium concentrations ranged from 70 to 2000 mg/kg, lead concentrations ranged from 400 to 16,000 mg/kg, and zinc concentrations ranged from 23,000 to 500,000 mg/kg. In addition, the TCLP metals results indicated lead concentrations indicative of characteristic hazardous waste as per Title 40 of the *Code of Federal Regulations* (CFR), Part 261. The pH analytical results indicated neutral to alkaline pH, and ranged from 6.3 to 9.3 standard units (SU). Asbestos results indicated asbestos concentrations ranging from 10 to 20 percent. The highest concentration of asbestos was detected in white material collected behind building 1943. The VOC analytical results did not indicate the presence of VOCs. TPH analytical results indicated that the material consisted of carbon heavy oils. PCB analytical results indicated Aroclor 1260 at a concentration of 4.2 mg/kg, which exceeds the Toxic Substances Control Act (TSCA) regulatory limits in 40 CFR Part 761.61.

U.S. EPA initiated a removal action at the Site. The removal action will consist of the removal of ACM located behind building 1943, the removal of hazardous materials located in the laboratory building, and demolition of the laboratory building (Figure 3-3). The petroleum product in the manhole will not be addressed during this removal action. U.S. EPA has requested that WESTON START conduct perimeter air monitoring during removal activities to assist in identifying potential off-site migration of asbestos, metals, and dust particulates. The project description and schedule is provided in Section 4.0.

3.3 Contaminants of Concern/Target Analytes

During removal activities, there is a potential for contaminants to become airborne. Specifically, during the laboratory building demolition, the potential exists for dust particulates, metals (arsenic, cadmium, lead, and zinc), and asbestos to become airborne. During the asbestos removal of pipe wrap/insulation outside the Rolling Mill building and in the open yard area east of Building 1943, the potential exists for asbestos to become airborne. Therefore, during the laboratory building demolition, the main contaminants of concern will be particulates, metals (arsenic, cadmium, lead, zinc), and asbestos in air. During the asbestos removal, the main contaminant of concern will be asbestos in air.

4.0 Project Description and Schedule

During the on-site removal activities, air sampling will be conducted and consist of those tasks necessary to document and characterize any threats posed to human health and the environment at the Site. WESTON START is to conduct perimeter air sampling around the work zone using high-volume pumps and associated filter media. The air sampling at the site is anticipated to occur from September 9 to 18, 2009. Daily perimeter air sampling for asbestos analysis will be conducted during removal of asbestos pipe wrap/insulation and debris east of building 1943, and is expected to last approximately 7 days. Daily perimeter air sampling for particulates, metals, and asbestos analysis will be conducted during demolition of the lab building and is expected to last approximately 3 days. The sampling design is provided below in Section 6.0.

A commercial laboratory will be utilized for analytical services. START will be responsible for subcontracting the laboratory and will provide sample coordination including laboratory coordination and sample shipment/delivery. Sample labels and chain-of-custody (COC) paperwork will be generated by WESTON START. Samples will be packaged properly by WESTON START and shipped daily for next-day delivery unless a local laboratory is procured. The turn-around time for the sample data will be 24 hours for laboratory building demolition and the asbestos removal in the open field east of building 1943. The turnaround time will be one week for the asbestos air samples collected during the pipe wrap/insulation removal outside the Rolling Mills building. The samples will be reviewed and validated by a START chemist within two weeks of data receipt from the laboratory.

5.0 Project Quality Objectives

5.1 Project Objectives

The objective of sampling activities is to conduct perimeter air sampling during demolition of the lab building and removal of ACM at the Site to ensure that metals (arsenic, cadmium, lead, and zinc), particulates, and asbestos are not migrating off site and posing a threat to human health and the environment.

5.2 Measurement and Performance Criteria

Generic measurement and performance criteria described in the *START III Generic QAPP* will be used to ensure that data are sufficiently sensitive, precise, accurate, and representative to support site decisions.

5.3 Data Quality Objectives

Data quality objectives address requirements that include when, where, and how to collect samples, the number of samples, and the limits on tolerable error rates. These steps should periodically be revisited as new information about a problem is learned.

The sampling results for metals (arsenic, cadmium, lead, and zinc), total particulates, and asbestos will be compared to either the Occupational Safety and Health Administration (OSHA) 8-hour time weighted average (TWA) Permissible Exposure Limits (PEL) or National Institute of Occupational Safety and Health (NIOSH) Recommended Exposure Level (REL), whichever is more restrictive. The exposure limits to which analytical results will be compared are listed below.

Contaminant of Concern	**Exposure Limit**
Arsenic	***0.002 mg/m^3
Cadmium	*0.005 mg/m^3
Lead	*0.05 mg/m^3
Zinc	**5 mg/m^3
Total Particulates (respirable fraction)	*5 mg/m^3
Asbestos	*0.1 f/cc

Notes:
*OSHA PEL
**As stated in the NIOSH pocket guide, the exposure limit listed for zinc oxide (zinc is not listed) is for total particulates since zinc particulates are not regulated by OSHA.
***NIOSH REL
mg/m^3 – milligram per cubic meter
f/cc – asbestos fiber (>5 µm long) per cubic centimeter

6.0 Sampling Design

START will perform the Site activities detailed in the following subsections.

6.1 Sample Collection

START will collect filter media samples from designated high-volume air pumps. The collection of each sample type is described below.

- **Air Sampling for Asbestos**. During the removal of ACM east of behind building 1943 and

pipe wrap/insulation and during demolition of the lab building, asbestos air samples will be collected daily at each of three pre-designated station locations (Figure 6-1). The pre-designated station locations will be evaluated daily based on wind direction and may change accordingly. The asbestos sampling and analysis will be performed in accordance with NIOSH Method 7400. If analytical results exceed the action levels, the sample may be subsequently analyzed in accordance with NIOSH Method 7402. The asbestos sampling shall be conducted using Sensidyne Aircon-2 high-volume air samplers and cellulose ester membrane sampling media. The samples will be collected over a 6 to 8-hour period. The sampler operates at a flow rate of 2 to 30 liters per minute for the sample collection. Flow checks will be documented on a field data sheet and/or log book.

- **Air Sampling for Total Particulates and Metals (Arsenic, Cadmium, Lead, and Zinc).** During the demolition of the lab building, particulate air samples will be collected daily at each of four pre-designated station locations (Figure 6-2). The pre-designated station locations will be evaluated daily based on wind direction and may change accordingly. Particulate air sampling and analysis will be performed in accordance with the NIOSH Method 0500. Metals sampling and analysis will be performed in accordance with NIOSH Method 7300. Sensidyne Aircon-2 high-volume air samplers will be used to collect samples of particulates and metals using the same filter. The filter media will consist of a 0.5 micron (µm) pre-weighed polyvinyl chloride (PVC) filter. The samples will be collected over a 6- to 8-hour period. The sampler operates at a flow rate of 2 to 30 liters per minute. The flow rate will be set between 2 and 4 liters per minute for the sample collection. Flow checks will be documented on a field data sheet and/or log book.

The air sample media, flow rate volume, and preservation requirements are presented in **Table 2: Sampling and Analysis Summary.**

6.2 Sample Numbering System

All samples for analysis, including QC samples, will be given a unique sample number. The sample numbers will be recorded in the field logbook, the COC paperwork, and the shipment documents.

WESTON START will assign each sample a project sample number. The project sample number highlights the suspected contaminated area and location, and will be used for documentation purposes in field logbooks, as well as for presentation of the analytical data in memoranda and reports. The project samples will be identified using the following format:

MH-PM-X-mmddyy

Or

MH-ACM-X-mmddyy

Where:

- "MH" designates the sample is from the M&H Zinc Site
- "PM" designates an air sample for particulates and metals analysis collected during demolition of the laboratory building
- "ACM" designated an air sample for asbestos analysis collected during removal of asbestos
- "X" designates the station location (see Figures 6-1 and 6-2)
- "mmddyy" is the date

The field/media blank samples will be identified as "MB-analysis-mmddyy." Examples of the sample identifications for the Site are as follows:

- MH-PM-1A-091109: Sample collected during demolition of the laboratory building at station 1A on September 11, 2009
- MB-ACM-091109: Media blank sample for asbestos analysis associated with sampling date September 11, 2009

6.3 Management of Investigation-Derived Wastes

For purposes of this FSP, investigation-derived wastes are defined as any byproduct of the field activities that is suspected or known to be contaminated with hazardous substances. The performance of field activities will produce spent Personal Protective Equipment (PPE). Note that disposable equipment will be used for all sample collection and therefore, no decontamination water will be generated. All waste generated during the site assessment will be placed in trash bags and disposed of by the U.S. EPA Emergency and Rapid Response Services (ERRS) contractor during the removal.

7.0 Sampling Procedures

7.1 Sampling Standard Operating Procedures

The WESTON START team will follow the NIOSH and U.S. EPA Methods specified in Table 2 for the air sampling to be conducted at the Site.

7.2 Decontamination Procedures

General decontamination procedures are described in Section B.2 of the *START III Generic QAPP*. The following standard decontamination protocols will be used:

- All disposable sampling supplies and PPE will be bagged and disposed of by the U.S. EPA ERRS contractor.

8.0 Sample Handling, Tracking, and Custody Procedures

All samples will be identified, handled, shipped, tracked, and maintained under COC, in accordance with *START III Generic QAPP* Section B.3.

9.0 Field Analytical Methods and Procedures

9.1 Field Analytical Methods and Standard Operating Procedures

Field analytical methods will not be employed during the air sampling activities.

9.2 Field Testing Laboratory

A field testing laboratory will not be used during the air sampling events at the Site.

9.3 Screening/Confirmatory Analyses

Screening or confirmatory analyses will not be conducted at the site.

10.0 Fixed Laboratory Analytical Methods and Procedures

A U.S. EPA-certified commercial laboratory will be used. The laboratory name and contact information is as follows:

STAT Analysis Corp.
2242 W. Harrison, Suite 200
Chicago, IL 60612
312-733-0551

The laboratory analytical methods and procedures are detailed in Table 2 of this FSP.

11.0 Quality Control Activities

11.1 Field Quality Control

Field QC samples will be collected and analyzed for this project at the frequency described in *START III Generic QAPP*, Table 4. The number of QC samples collected for each analytical parameter and concentration level are listed in **Table 2: Sampling and Analysis Summary.**

11.2 Analytical Quality Control

QC for analytical procedures will be performed at the frequency described in *START III Generic QAPP*, Tables 5 and 6. In addition, method-specific QC requirements will be used to ensure data quality.

11.3 Performance Evaluation Samples

Performance Evaluation Samples will not be collected during this sampling event.

12.0 Documentation, Records, and Data Management

Documentation, record keeping, and data management activities will be conducted in accordance with the *START III Generic QAPP*, Section B.10.

13.0 Quality Assurance Assessment and Corrective Actions

No field audits will be conducted due to the short amount of time that sampling will be conducted at the site.

14.0 Reports to Management

Reports to management will be written and distributed in accordance with the *START III Generic QAPP,* Section C.

15.0 Steps 1, 2 and 3: Data Review Requirements and Procedures

Step 1: Data collection activities, including sample collection and data generation, will be verified in accordance with the *START III Generic QAPP*, Section D.

Step 2: Data will be validated by a START chemist. The data will be validated in accordance with the *START III Generic QAPP*, Section D.

Step 3: Data will be reviewed for usability in accordance with the *START III Generic QAPP*, Section D.

Table 1
FSP Revision Form

Site: M&H Zinc, LaSalle County, Illinois
OSC: Theresa Holz
TDD: S05-0001-0908-009

Date	Rev. No.	Proposed Change to FSP/QAPP	Reason for Change of Scope/Procedures	FSP Section Superseded	Requested By	Approved By

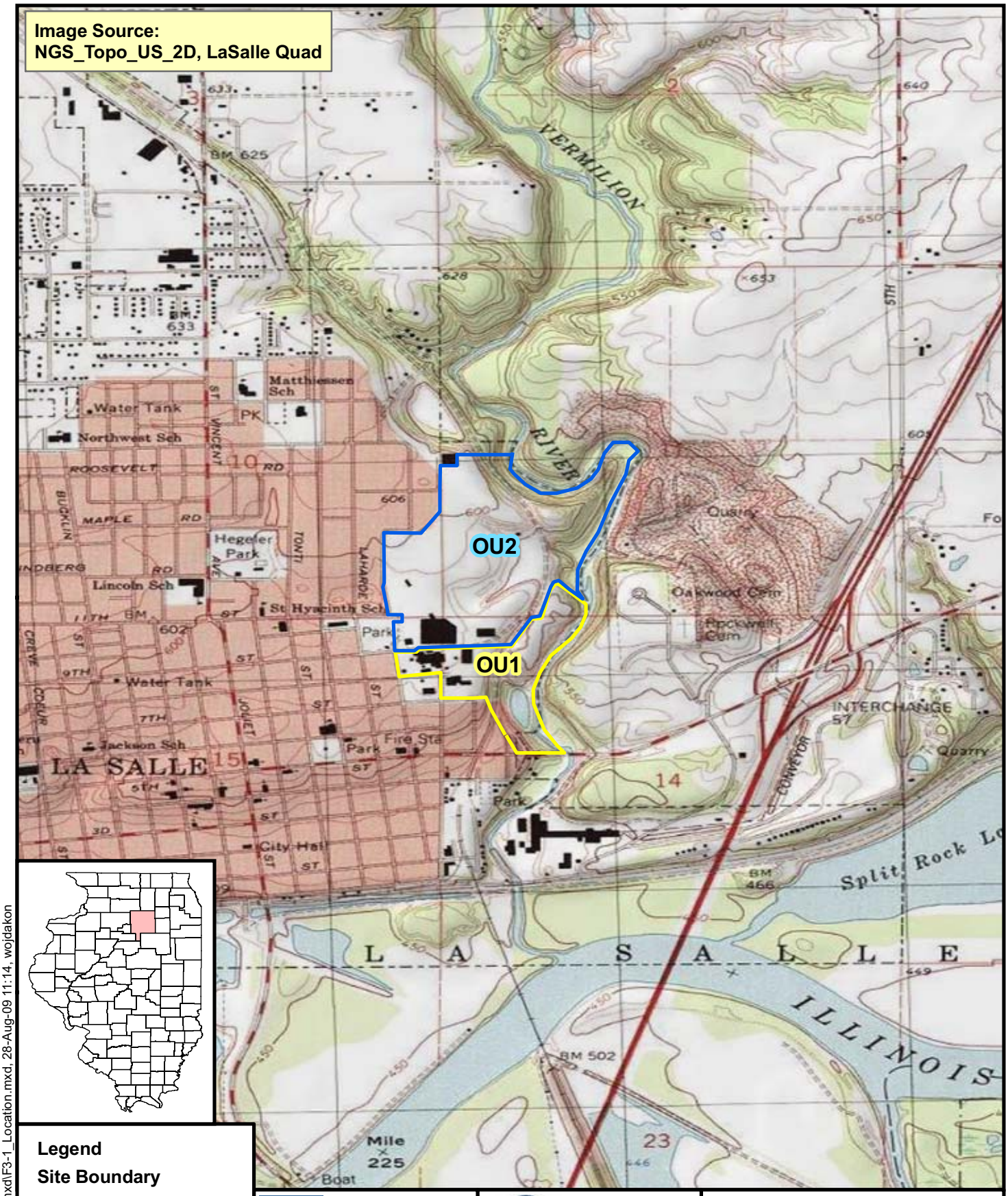
Table 2
Sampling and Analysis Summary

Site: M&H Zinc, LaSalle County, Illinois
OSC: Theresa Holz
TDD: S05-0001-0908-009

Matrix	Analytical Parameter	Analytical Method	Air Sampling Media	Sampling Flow Rate (liters/minute)	Preservation Requirements	No. of Sampling Locations	No. of Days Sampling	No. of Blanks (1 per sampling event)	Total No. of Samples to Lab
Air	Arsenic, Cadmium, Lead, Zinc	NIOSH 7300	37-mm, 5-µm PVC filter	1-4	None	4	3	3	15
	Total Particulates	NIOSH 0500	Tared 37-mm, 5-µm PVC filter	1-2	None	4	3	3	15
	Asbestos	NIOSH 7400	25-mm, 0.45-µm CEM filter	1-5	None	3 (asbestos removal)	10	10	40
	Asbestos	NIOSH 7400	25-mm, 0.45-µm CEM filter	1-5	None	4 (lab demolition)	3	3	15

Notes:
°C – Degrees Celsius
µm – micron
CEM – Cellulose ester membrane
EPA – United States Environmental Protection Agency
mm - Millimeter
MS/MSD – Matrix spike/ matrix spike duplicate
NIOSH – National Institute of Occupational Safety and Health
No. – Number
PCB – Polychlorinated biphenyl
PUF – Polyurethane foam
PVC – Polyvinyl chloride

FIGURES



Legend

Site Boundary

OU1

OU2

0 2,000 Feet

N

Prepared for:
U.S. EPA REGION V
Contract No.: EP-S5-06-04
TDD: S05-0001-0908-009
DCN: 729-2A-AEMA

Prepared By:
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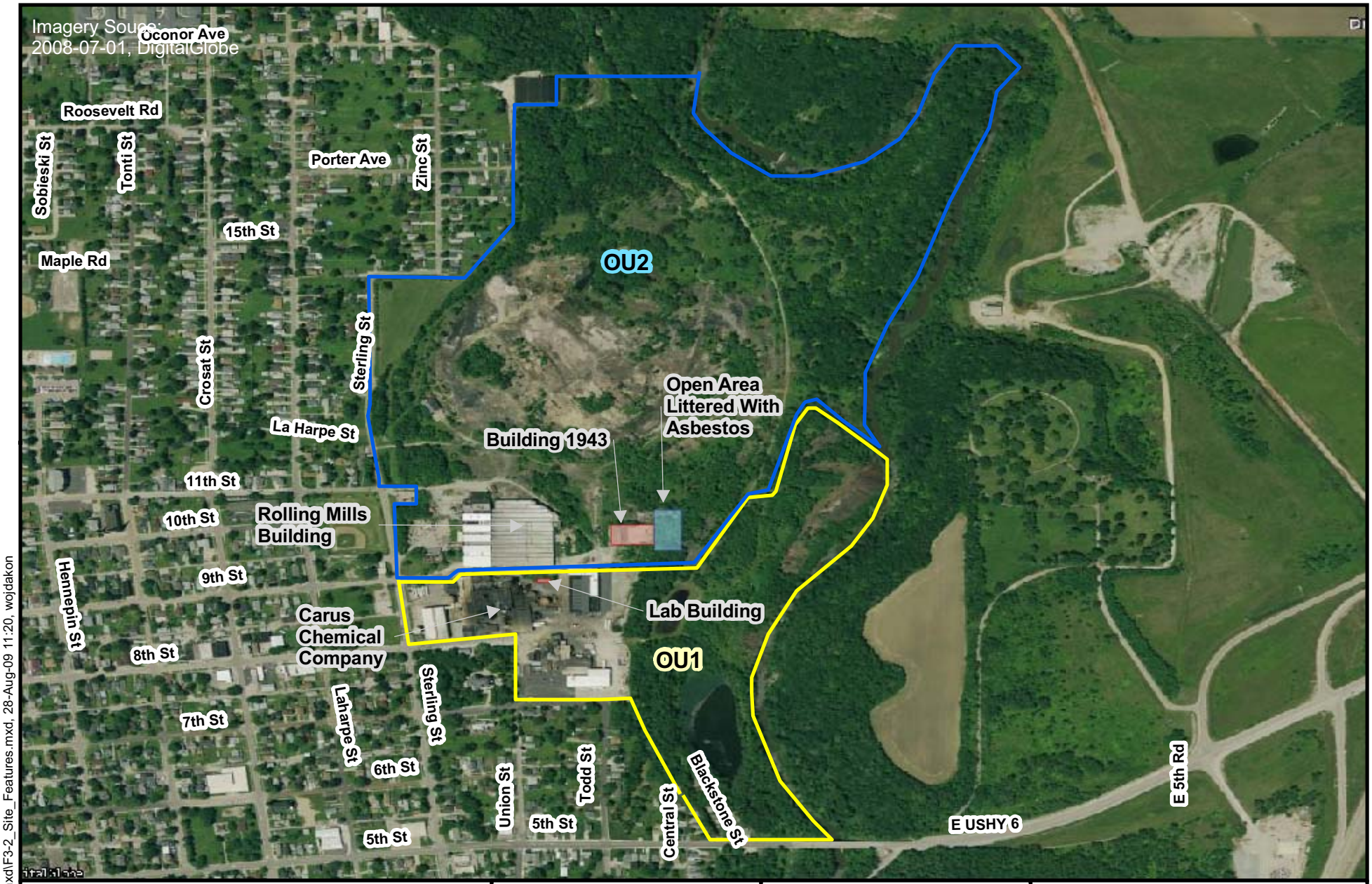
Vernon Hills, Illinois 60061

Figure 3-1
Site Location Map
M & H Zinc Fund Lead RV
LaSalle, LaSalle County, Illinois

File: D:\MH_Zinc\mxd\F3-1_Location.mxd, 28-Aug-09 11:14, wojdakon



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Legend

Site Boundary

OU1 OU2

0 800 Feet

N

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TDD: S05-0001-0908-009
DCN: 729-2A-AEMA

Prepared By:
WESTON SOLUTIONS
20 N. Wacker Drive
Suite 1210
Chicago, Illinois 60606

Figure 3-2
Site Features Map
M & H Zinc Fund Lead RV
LaSalle, LaSalle County, Illinois

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Legend

0 200 Feet

N

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DCN: 729-2A-AEMA

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Chicago, Illinois 60606

Figure 3-3
Removal Areas
M & H Zinc Fund Lead RV
LaSalle, LaSalle County, Illinois

Legend

- Sampling Locations
- Building 1943

0 200 Feet

N

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DCN: 729-2A-AEMA

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Chicago, Illinois 60606

Figure 6-1
Air Sampling Stations for
Asbestos Removal
M & H Zinc Fund Lead RV
LaSalle, LaSalle County, Illinois

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Legend

- Sampling Locations
- Lab Building

0 200 Feet

N

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Figure 6-2
Air Sampling Stations for
Laboratory Building Demolition
M & H Zinc Fund Lead RV
LaSalle, LaSalle County, Illinois